

A wide-angle photograph of an Arctic landscape. The foreground and middle ground are covered in a vast expanse of broken sea ice, with dark water visible between the ice floes. The horizon is flat and distant. The sky is filled with large, dramatic, white and grey clouds, with patches of blue sky visible. The overall tone is cool and atmospheric.

NOAA in the Arctic 2015

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NOAA's Arctic Vision

- NOAA envisions an Arctic where:
 - Conservation, management, and use are based on sound science, and support healthy, productive, and resilient communities and ecosystems,
 - The global implications of Arctic change are better understood and predicted.

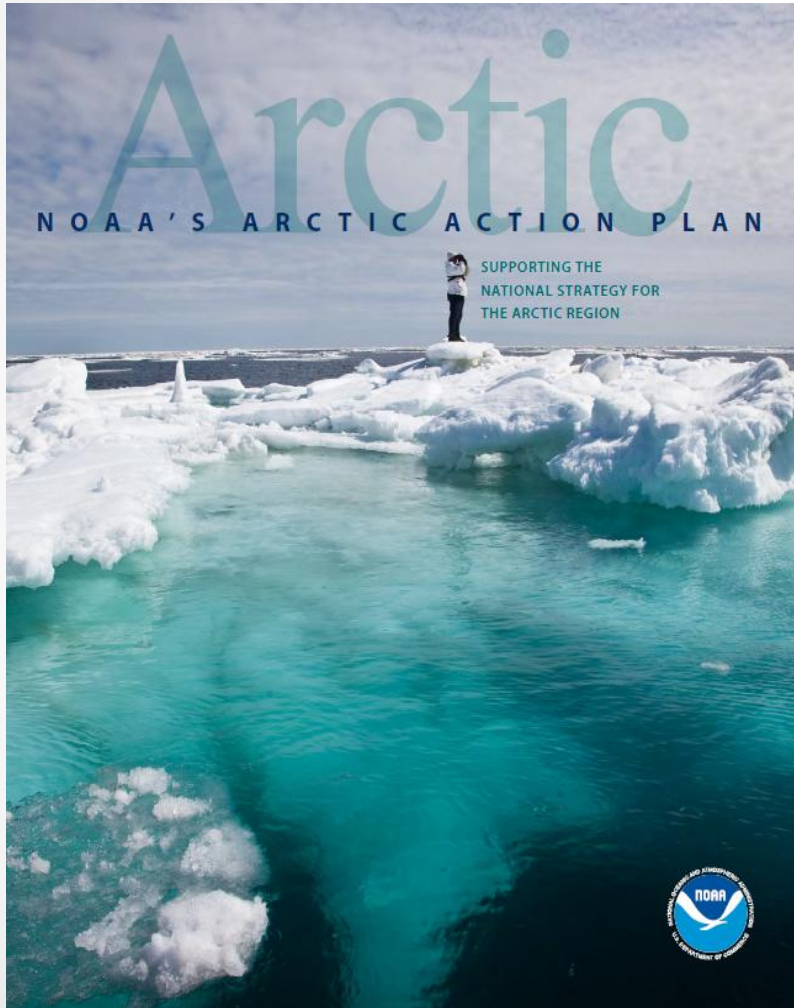


Photo © Bill Hess

National Strategy for the Arctic Region

| National Strategy for the Arctic Region — lines of effort — | NOAA's Arctic Vision and Strategy — strategic goals — |
|--------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> • Advance U.S. security interests | <ul style="list-style-type: none"> • Forecast sea ice |
| <ul style="list-style-type: none"> • Pursue responsible Arctic region stewardship | <ul style="list-style-type: none"> • Improve weather and water forecasts and warnings |
| | <ul style="list-style-type: none"> • Strengthen foundational science to understand and detect Arctic climate and ecosystem changes |
| | <ul style="list-style-type: none"> • Improve stewardship and management of ocean and coastal resources in the Arctic |
| <ul style="list-style-type: none"> • Strengthen international cooperation | <ul style="list-style-type: none"> • Advance resilient and healthy Arctic communities and economies • Enhance international and national partnerships |

NOAA's Arctic Action Plan



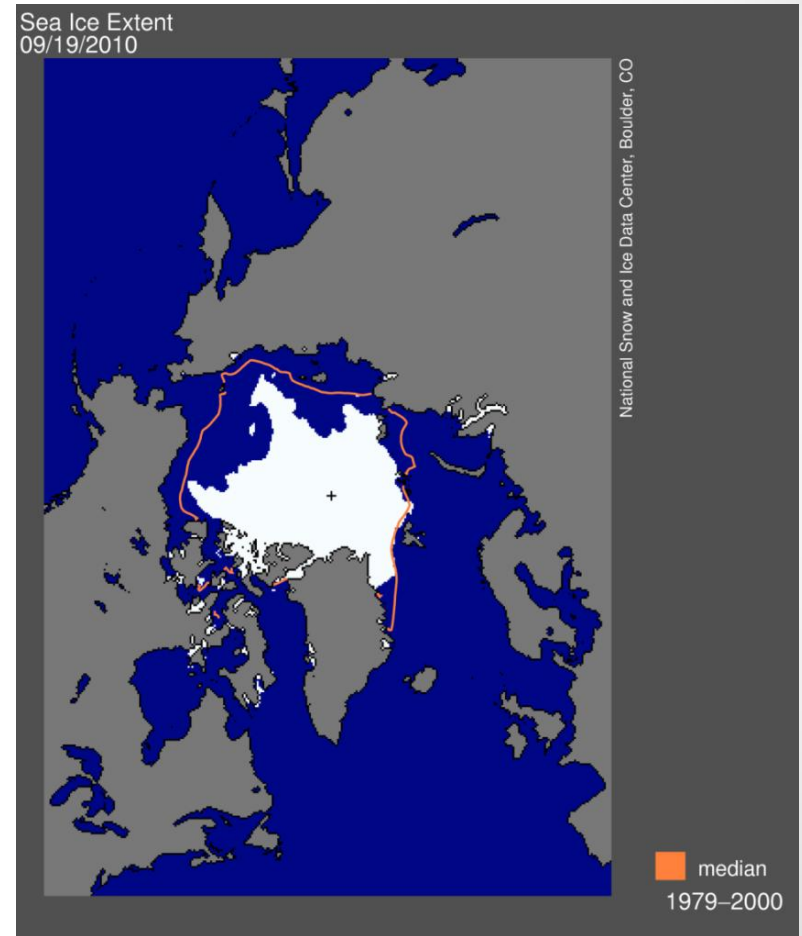
- Building out from NOAA's Arctic Vision and Strategy (released 2011)
- Provides greater detail on activities from 2014-2015

Goal 1: Forecast Sea Ice

Goal Statement – Accurate, quantitative, daily forecasts to decadal predictions of sea ice are provided to support safe operations and ecosystem stewardship.

Five-year Strategy

- Improve daily to weekly sea ice models and forecasts and new seasonal prediction services
- Multi-decadal sea ice projections
- Retrospective and prospective studies of the linkages between changes in Arctic sea ice and hemispheric weather and climate

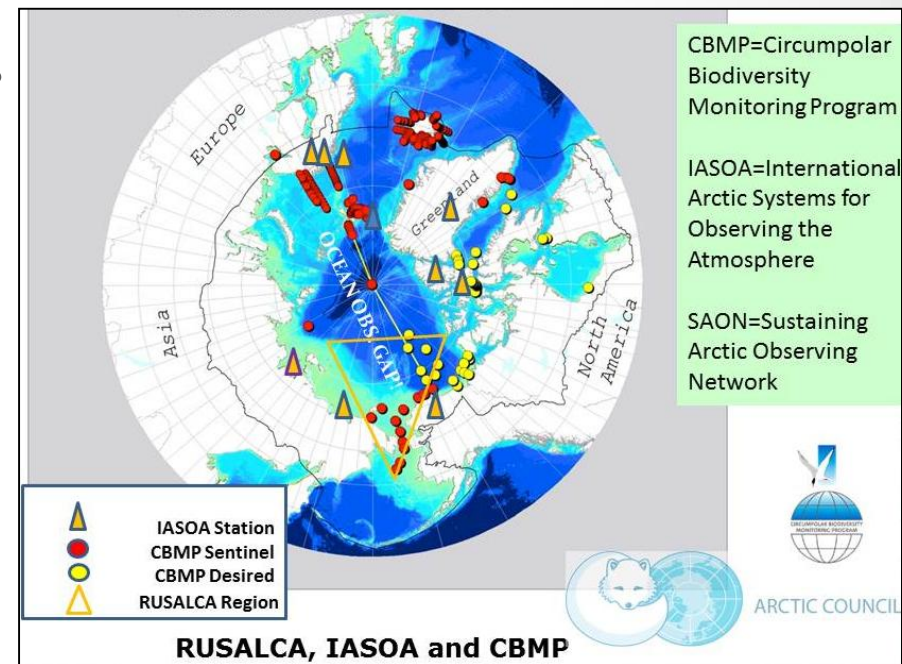


Goal 2: Strengthen Foundational Science to Understand and Detect Arctic Climate and Ecosystem Changes

Goal Statement – Improved baseline observations and understanding of Arctic climate and ecosystems reduces the uncertainty in assessing and predicting impacts caused by a changing Arctic.

Five-year Strategy

- NOAA's Arctic Science program is focused on developing **Arctic Observing Networks**
 - Distributed Biological Observatory
 - International Arctic Systems for Observing the Atmosphere (IASOA)



Goal 3: Improve Weather and Water Forecasts and Warnings

Goal Statement - Advanced, accurate forecasts and warnings are provided to ensure society can prepare for and respond appropriately to weather-related routine and extreme events.

Five-year Strategy

- Improve Arctic marine weather, sea ice and storm forecast services.
- Protect northern and western Alaska coastal communities from storm surge, inundation, and erosion hazards.

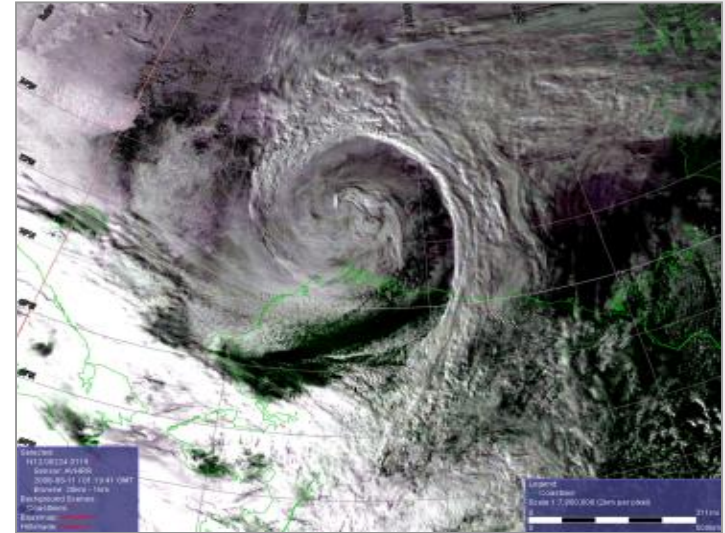


Photo 10: Shoreline erosion during coastal storm in Shismaref. (Credit: Tony Weyiouanna)

Goal 4: Enhance International and National Partnerships

Goal Statement - National and international partners are engaged to promote cooperation and sharing of data, observational platforms, and intellectual resources to enable more rapid and comprehensive attainment of NOAA's Arctic goals.

Five-year Strategy

- Encourage data sharing at multiple levels among providers and users
- Expand Arctic protection mechanisms
- Provide leadership and resources to support Arctic governance and science organizations
- Support development of effective SAON process

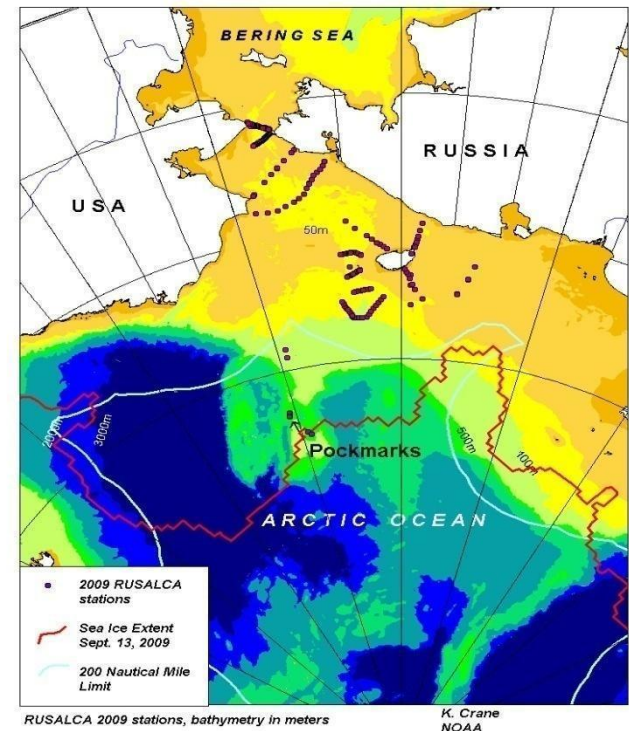


Goal 5: Improve Stewardship and Management of Ocean and Coastal Resources in the Arctic

Goal Statement - Conservation, stewardship, management, and use of ocean and coastal resources are based on sound science, and support healthy, productive, and resilient ecosystems and communities.

Five-year Strategy

- Continue ongoing assessment programs on marine mammals, fish, and shellfish
- Expand existing programs
 - RUSALCA; Arctic EIS
 - NOAA's ocean acidification program



RUSALCA Ecosystem stations taken in 2009 from the Bering Strait north to 77°N on the Chukchi Plateau.

Goal 6: Advance Resilient and Healthy Arctic Communities and Economies

Goal Statement - Resilient and healthy Arctic communities and economies through improved geospatial infrastructure, safe navigation, oil spill response readiness, and climate change adaption strategies.

Five-year Strategy

- Overhaul the Arctic Geospatial Framework
- Deliver scientific support for Arctic pollution response
- Survey and map Arctic waters and shoreline
- Support coastal communities with adaptive strategies and planning tools



Photo 9: Home falling over eroded bank in Shishmaref. (Credit: Tony Weyiouanna)

NOAA's Arctic Task Force Direction

- Engagement and support for the White House's Arctic Initiative and Arctic Executive Steering Committee.
- Guidance and support for the DOC Secretary's role in the Arctic; and
- A clear and concise strategy that focuses on NOAA's most distinctive and important mission in the Arctic.



Major Drivers For NOAA's Work In The Arctic Region

- Energy Development
- Transportation & Economic Development
- Climate Impacts

Prioritization Criteria:

- Addresses critically emerging issues.
- Has National relevance.
- Supports the US Chairmanship of the Arctic Council.
- Aligns with NOAA's mission.
- Consistent with NOAA's priorities and DOC Strategic Plan.
- Leverages partnerships & cross NOAA Line Office expertise & assets.



NOAA's Arctic Targeted Areas

- Improve weather and sea ice observations, forecasts, and warnings.
- Improve understanding of climate impacts on biological resources, human health, and natural habitats.
- Improve navigational services.



QUESTIONS?



THANK YOU!